

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: LUMARK

Report Number: P959338

Luminaire Tested: **NAV-SB1A-740-U-T4FT-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959338
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1A-740-U-T4FT-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 4000K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV FORWARD
THROW OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3683.9 lumens
Efficiency: N/A
Efficacy: 119.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G1

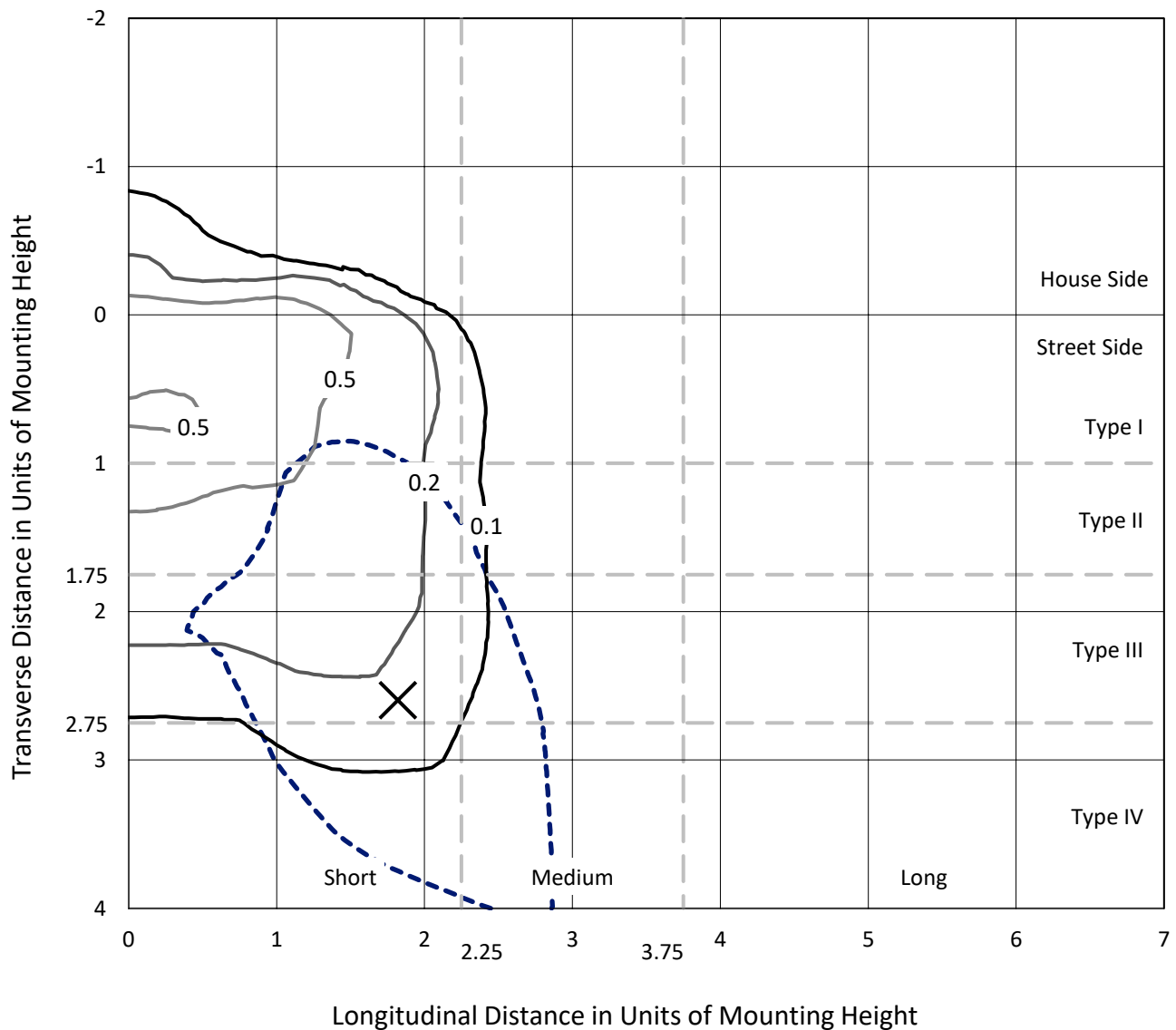
Input Watts (W): 30.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

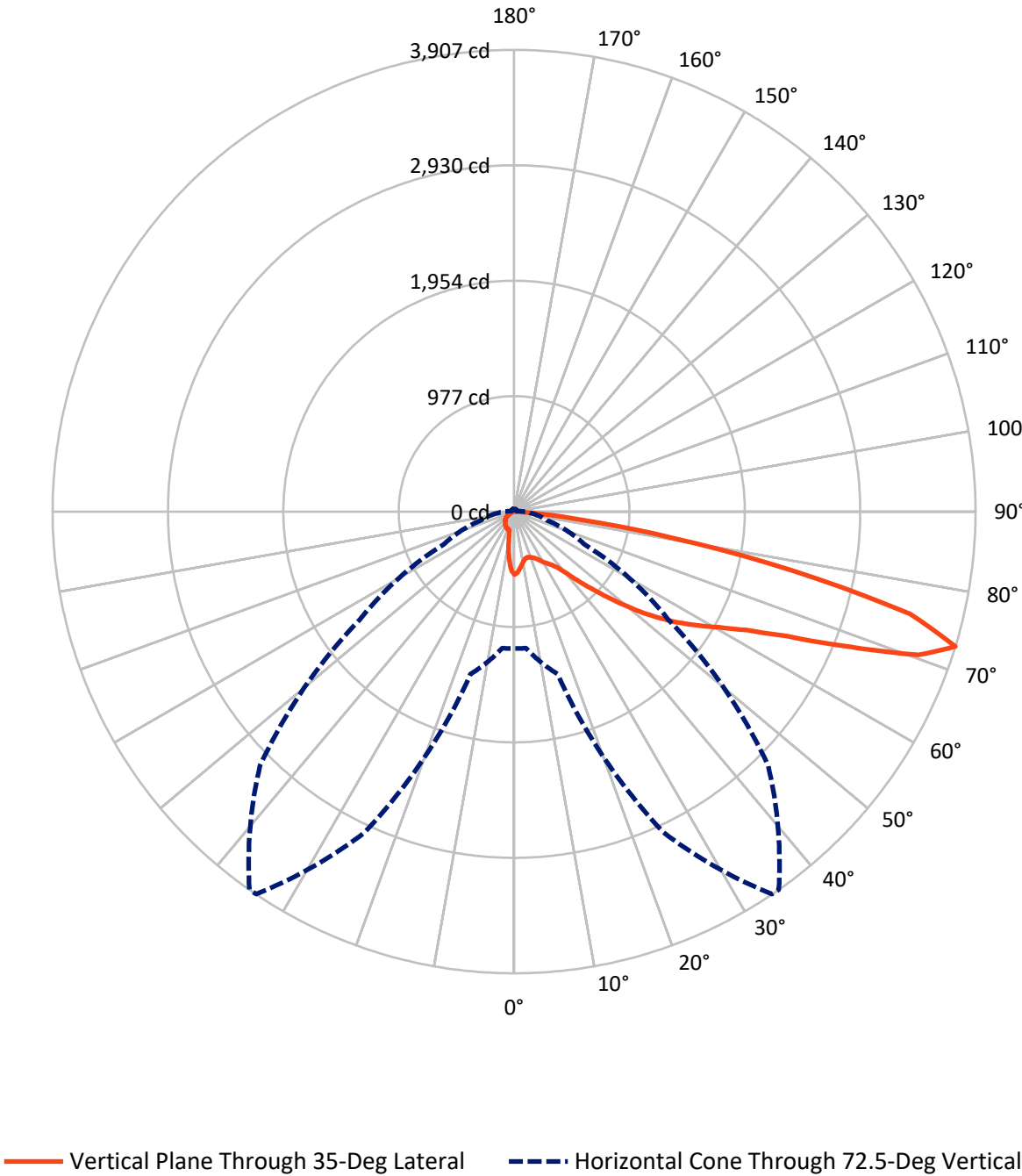
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.9 fc
Type IV - Short - N/A

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Luminous Intensity Polar Plot



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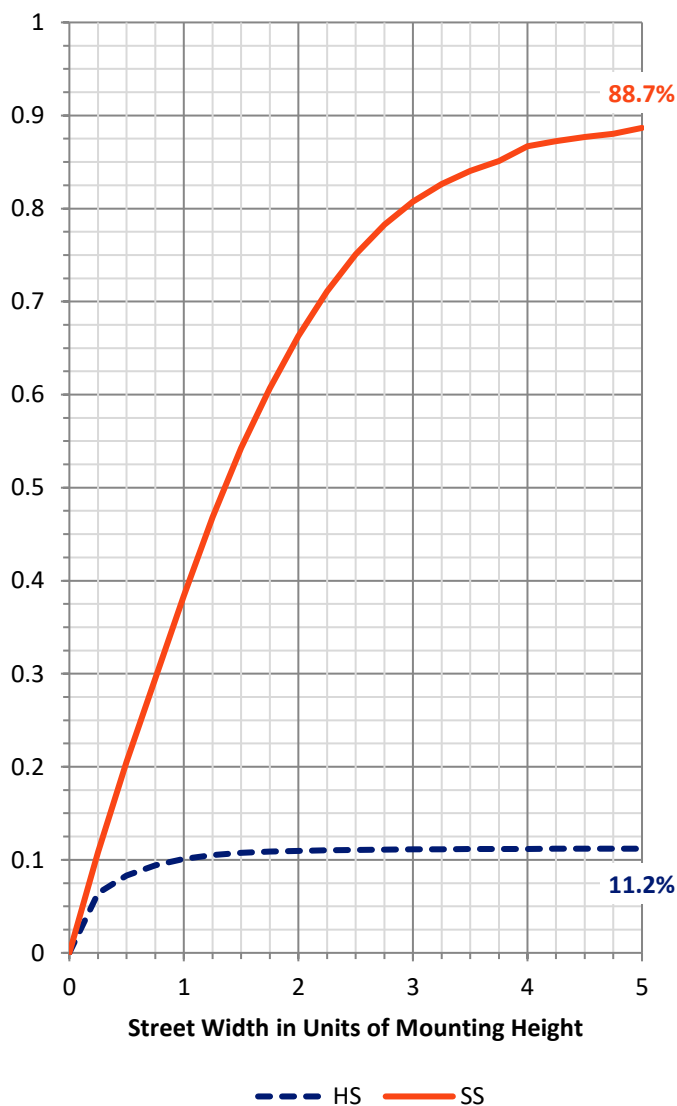
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	414.6	0.0	414.6
	% Fixture	11.3	0.0	11.3
Street Side	Lumens	3269.2	0.0	3269.2
	% Fixture	88.7	0.0	88.7
Total	Lumens	3683.9	0.0	3683.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.9	1.2
10°-20°	102.6	2.8
20°-30°	166.7	4.5
30°-40°	278.2	7.6
40°-50°	526.3	14.3
50°-60°	836.4	22.7
60°-70°	1034.6	28.1
70°-80°	643.1	17.5
80°-90°	52.0	1.4
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	3683.9	100.0
0°-180°	3683.9	100.0

Coefficient of Utilization



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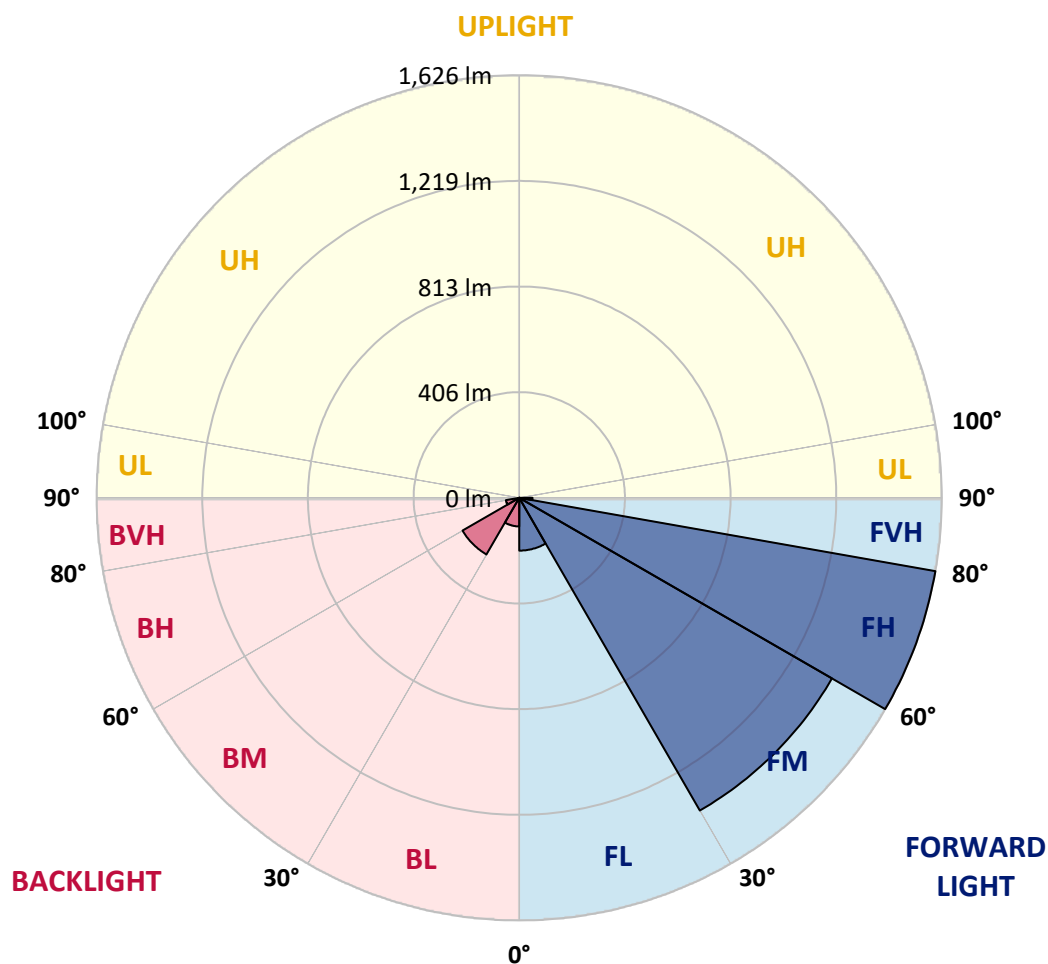
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	203.1	5.5			
FM	(30°-60°)	1389.2	37.7			
FH	(60°-80°)	1625.7	44.1			G1/1800
FVH	(80°-90°)	51.3	1.4			G1/100
BL	(0°-30°)	110.2	3.0	B1/500		
BM	(30°-60°)	251.7	6.8	B1/1000		
BH	(60°-80°)	52.0	1.4	B0/110		G0/110
BVH	(80°-90°)	0.7	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	533.9	533.9	533.9	533.9	533.9	533.9	533.9	533.9	533.9	533.9	533.9
2.5°	510.1	514.4	515.3	516.6	516.6	518.2	521.0	524.7	530.9	534.2	536.4
5°	470.2	473.4	477.5	480.7	487.0	487.8	498.3	508.5	522.9	533.6	541.2
7.5°	430.0	433.8	439.2	447.0	455.1	457.6	473.4	490.8	513.4	533.6	546.3
10°	401.7	401.9	406.8	414.6	427.5	430.5	450.0	474.6	502.9	530.4	551.1
12.5°	385.7	387.7	389.8	395.8	408.2	410.0	430.8	459.7	492.3	528.5	556.9
15°	385.7	387.0	388.4	391.3	401.4	403.0	421.4	450.3	487.0	529.3	566.0
17.5°	389.8	392.0	390.8	394.3	404.9	406.0	422.2	447.5	486.7	534.4	580.0
20°	399.4	401.1	398.9	401.1	411.6	413.8	430.5	452.6	491.3	543.4	597.6
22.5°	414.9	415.6	410.5	412.2	423.0	425.7	445.2	467.2	502.4	557.7	621.2
25°	434.3	435.9	428.1	430.0	440.2	443.5	465.9	489.1	519.9	577.4	651.1
27.5°	456.7	457.6	450.8	450.5	463.7	468.3	491.0	516.1	543.4	602.2	688.8
30°	482.4	484.8	478.3	477.2	493.9	497.7	520.2	549.3	577.9	639.5	742.6
32.5°	502.6	504.5	500.7	503.4	520.4	523.4	555.6	596.2	632.1	692.4	815.7
35°	531.8	532.8	524.2	529.1	548.5	556.1	603.8	662.2	700.5	758.8	911.2
37.5°	637.3	637.3	600.5	576.6	595.2	602.0	669.9	745.0	784.6	847.9	1031.7
40°	783.3	780.8	727.1	678.0	675.6	688.8	764.1	849.4	893.5	954.7	1167.2
42.5°	939.1	935.3	862.1	813.5	805.4	810.1	872.9	978.3	1023.1	1085.1	1312.9
45°	1077.3	1076.1	1009.2	943.9	929.4	943.9	1008.7	1128.8	1160.9	1226.3	1458.4
47.5°	1193.1	1193.1	1144.2	1101.6	1094.0	1102.7	1192.5	1295.9	1292.9	1376.6	1600.1
50°	1326.5	1325.3	1278.9	1260.5	1268.3	1280.5	1404.1	1471.9	1429.6	1524.3	1726.7
52.5°	1419.8	1426.3	1410.4	1407.4	1447.3	1468.4	1619.0	1644.1	1551.8	1664.4	1821.4
55°	1493.7	1501.3	1519.7	1540.5	1617.3	1644.9	1827.2	1807.4	1654.1	1785.9	1876.0
57.5°	1598.5	1587.7	1616.0	1657.1	1781.6	1814.8	2028.8	1961.5	1736.5	1884.4	1881.9
60°	1725.6	1727.2	1732.1	1783.9	1945.3	1988.0	2227.4	2107.3	1789.3	1944.8	1816.1
62.5°	1878.4	1880.9	1890.8	1970.5	2165.3	2205.6	2439.1	2226.6	1813.6	1927.8	1646.0
65°	1867.9	1878.1	1989.6	2262.0	2499.8	2539.4	2686.0	2310.2	1776.9	1772.3	1340.2
67.5°	1701.6	1718.3	1904.9	2610.2	3004.0	3048.2	2984.6	2326.8	1618.5	1378.2	874.3
70°	1483.5	1489.4	1713.8	2923.3	3587.8	3632.7	3251.8	2145.6	1228.2	768.7	391.7
72.5°	1158.6	1159.9	1423.0	2995.9	3904.7	3907.2	3042.1	1592.8	660.5	295.3	136.0
75°	827.6	819.5	953.1	2429.6	3435.4	3462.9	2280.6	747.1	252.4	139.5	67.8
77.5°	443.7	452.6	539.4	1440.8	2373.2	2420.1	1244.4	215.4	128.5	95.0	44.8
80°	137.1	144.7	221.1	659.7	1344.2	1372.6	461.4	95.8	89.6	67.8	29.4
82.5°	43.2	44.8	103.1	277.3	557.9	570.9	133.7	54.2	61.3	44.8	17.3
85°	12.4	12.7	45.9	103.4	138.0	140.6	37.5	21.0	35.1	27.8	8.9
87.5°	1.3	4.3	17.3	17.3	12.2	11.9	4.1	4.6	9.9	3.5	1.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	533.9	533.9	533.9	533.9	533.9	533.9	533.9	533.9	533.9	533.9	533.9
2.5°	534.9	535.3	531.8	525.8	519.4	513.9	507.2	501.8	498.0	496.9	498.9
5°	538.7	536.9	526.8	508.8	487.2	468.6	447.8	431.3	420.6	415.9	417.6
7.5°	544.5	539.0	517.2	481.5	440.2	403.5	366.3	337.4	319.1	309.9	311.2
10°	549.3	538.5	501.0	442.2	378.9	323.4	273.2	238.3	218.9	209.7	210.0
12.5°	553.9	538.2	479.9	395.4	309.9	241.9	195.2	177.8	172.5	170.6	170.0
15°	562.5	539.0	453.5	342.0	241.1	182.8	165.7	165.4	166.6	166.0	165.7
17.5°	574.4	539.9	423.5	285.4	185.9	161.1	160.3	162.8	164.4	163.6	163.3
20°	589.8	543.0	391.7	229.2	159.8	155.7	157.6	159.8	161.1	159.8	159.5
22.5°	611.4	548.8	356.8	184.1	151.4	152.5	154.2	156.5	158.0	156.0	155.7
25°	637.9	557.7	322.6	160.1	147.4	148.7	151.2	153.9	155.5	153.5	153.3
27.5°	672.1	571.9	291.0	154.7	143.3	144.1	147.6	151.7	153.9	151.4	151.4
30°	721.8	595.4	263.7	157.1	140.9	139.0	143.9	149.5	152.0	149.9	149.5
32.5°	787.6	628.6	247.0	160.9	139.8	133.0	137.7	144.9	149.0	147.6	147.6
35°	874.0	679.2	240.5	165.2	139.0	126.9	130.1	138.0	144.9	146.3	146.3
37.5°	978.8	749.3	242.4	167.1	136.6	121.8	123.3	130.1	139.3	143.6	144.7
40°	1097.8	831.1	253.2	165.2	133.9	117.5	117.7	122.8	130.9	137.4	139.5
42.5°	1220.6	926.7	273.2	158.2	131.4	113.7	112.9	116.3	121.8	126.3	128.2
45°	1337.5	1024.9	292.8	148.4	128.5	109.9	107.9	109.4	110.4	112.3	113.4
47.5°	1439.5	1094.0	287.2	139.5	124.4	105.6	102.3	101.8	98.5	98.3	98.0
50°	1509.9	1109.2	255.1	130.7	118.5	100.7	95.5	92.4	86.6	83.9	84.3
52.5°	1532.4	1049.5	208.4	121.8	108.8	94.2	86.9	81.8	74.7	72.4	72.1
55°	1502.6	932.5	166.6	110.9	95.3	85.6	77.5	70.7	65.1	62.1	62.1
57.5°	1430.1	783.8	131.7	98.3	81.0	75.8	67.8	61.0	56.2	53.2	52.7
60°	1309.6	622.5	104.2	83.1	69.1	65.3	57.0	52.7	48.3	44.8	44.0
62.5°	1127.0	444.3	81.8	65.9	57.8	53.4	48.6	45.3	40.2	35.4	34.5
65°	879.4	271.8	63.1	48.3	46.4	44.3	41.3	38.3	32.1	27.3	26.4
67.5°	554.7	128.7	45.1	36.5	36.7	35.7	34.2	31.9	27.3	23.0	22.4
70°	244.3	62.3	29.7	27.8	27.3	27.3	28.4	27.6	23.2	19.2	18.3
72.5°	83.1	33.5	22.1	21.0	19.7	19.5	23.8	23.0	18.7	14.9	14.0
75°	43.5	22.4	16.2	15.1	11.9	14.3	18.9	17.8	13.2	9.7	8.9
77.5°	28.4	15.9	11.1	9.7	6.8	9.4	14.0	12.4	7.8	4.8	4.3
80°	17.8	10.6	6.5	4.6	3.3	5.1	7.6	5.4	3.0	1.1	0.8
82.5°	9.4	5.4	2.5	1.6	1.3	1.6	1.8	1.3	0.5	0.0	0.0
85°	3.8	1.8	0.8	0.5	0.3	0.0	0.5	0.3	0.0	0.0	0.0
87.5°	1.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)